Roundtable on Sustainable Biofuels

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Indicators of Compliance For the RSB Principles & Criteria

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Principle 1: Legality

RSB Principle		
Principle 1. Biofuel operations shall follow all applicable laws and regulations.		
RSB Criterion	Scope and Requirements	Indicators
Criterion 1a. Biofuel operations shall comply with all applicable laws and regulations of the country in which the operations occur and with relevant international laws and agreements.	Operators who must comply: Feedstock Producer, Feedstock Processor and Biofuel Producer.	 1.a.i1 The Operator demonstrates an awareness of the applicable national laws and regulations and international laws and agreements. 1.a.i2 There is no evidence of systematic or major non compliance with any applicable laws and regulations. 1.a.i3 There is no evidence of systematic or major non compliance with any relevant international laws or agreements. 1.a.i4 Where applicable, the Operator is in compliance with the terms of issue of operating permits. Where the terms of the permit have been audited by an internal or external auditor (e.g., health and safety audits, waste management audits, air permit audits, building code audits, HR audits, etc.), there are no systematic or major violation which remain unresolved. For non small-scale Operators only:

1.a.5 There is an effective procedure for familiarizing staff with applicable laws and other regulatory requirements, and updating staff when there are changes.
1.a.i6 All personnel, including contractors, demonstrate a working knowledge of relevant codes of practice, operational guidelines and other accepted norms or agreements relevant to their responsibilities.
1.a.i7 The Operator can demonstrate that they have effective procedures in place to ensure that contractors and others responsible for operations on the property comply with applicable legal requirements.

Principle2: Planning, Monitoring and Continuous Improvement

RSB Principle

Principle 2. Sustainable biofuel operations shall be planned, implemented, and continuously improved through an open, transparent, and consultative Environmental and Social Impact Assessment (ESIA) and an economic viability analysis.

RSB Criterion	Scope and Requirements	Indicators
Criterion 2a. Biofuel operations shall undertake an Environmental and Social Impact Assessment (ESIA) to assess impacts and risks and ensure sustainability through the development of effective and efficient implementation, mitigation, monitoring and evaluation plans.	 Operators who must comply: Feedstock Producer, Feedstock Processor and Biofuel Producer. Minimum requirements Where an impact assessment is required by national, regional, and/or local laws, the process shall be integrated with the RSB process to avoid duplication of efforts, but the higher and more comprehensive standard shall be applied. Operators shall refer to and comply with the relevant aspects of the RSB ESIA guidelines and toolkits as determined by the scale and intensity of the operations. 	Note: any reference to ESIA, RESA, ESIR, ESMP guidelines or studies refers to the RSB ESIA guidelines and its specialist studies and required reporting procedures against the RSB ESIA guidelines published on the RSB web site 2.a.i1 Baseline surveys have been completed in accordance with existing RSB guidelines on the social, economic and environmental principles and criteria, as per the ESIA guideline which and specifically cover, but are not limited to: - Land use type as of 1 January 2009; - Current land use type; - Carbon in soil; socioeconomic issues;

- A screening exercise shall be required for all new and existing operations and extensions to operations, of all sizes to determine whether a full ESIA or Rapid Environmental or Social Assessment (RESA) is required. The screening exercise shall be done in accordance with the RSB screening guidelines.
- The ESMP as described in the RSB ESIA guidelines shall be required for all operations and shall ensure compliance with all RSB principles and criteria. Where there are progress requirements, they shall be detailed.
- The ESIA shall be carried out using independent and qualified professionals.
- Local experts shall be used to undertake the specialist social impact survey of the RSB ESIA together with the accredited professionals, to ensure that local customs, languages, practices and indigenous knowledge are respected and utilized in the ESIA process.
- Small-scale Operators that are working together and/or selling to the same processor or producer (such as those working in a cooperative or an outgrower scheme) shall be permitted to combine operations under one ESIA, RESA or ESMP process.
- For certain principles, the ESIA and/or ESMP

- Food availability including access, stability and utilization within the foodshed;
- Conservation values;
- Ecosystem services;
- Soil physical, chemical and biological properties
- Air quality;
- Physical, chemical and biological properties of the water resources within and outside the production site
- 2.a.i2 A screening process has been completed in accordance with the ESIA guidelines that indicates whether the Operator should carry out a RESA or a full ESIA or if only the ESMP is required.
- 2.a.i3 All reports required under the ESIA guidelines comply with all legal requirements of the relevant authority.
- 2.a.i4 An ESMP has been completed that integrates all requirements under the RSB standard and details the necessary mitigation, monitoring, and progress plans for biofuel production.
- 2.a.i5 Where ongoing monitoring requires changes to the ESMP, these are done according to RSB certification requirements, including any required stakeholder agreement and relevant authority clearance.

If a RESA or an ESIA is required:

shall extend beyond the scope of the immediate operational area, for instance for food security, water management and use, ecosystem impacts, biodiversity and conservation in accordance with the RSB ESIA guidelines.

2.a.i6 The scoping exercise of the ESIA or RESA, if applicable, covers all aspects of the operations and indicates what impacts may be expected and what specialist studies should be completed, in accordance with the ESIA guidelines

2.a.i7 An ESIA or a RESA, with all specialist studies, if applicable, has been carried out in accordance with the ESIA guidelines

2.a.i8 The CV of the ESIA/RESA team leader and details of the experience and affiliation of the members of the team is available and complies with the requirements under the ESIA guidelines and/or legal requirements including requirements for independence.

2.a.i9 There is evidence that local experts were included in the specialist social impact study (SIA).

2.a.i10 Through the ESMP process, and as described in the ESIA guidelines, ongoing engagement with the interested and affected stakeholders is taking place, where appropriate, and according to agreed time frames and suggestions and comments are being recorded and accommodated under the ongoing revision and updating process as described in the ESIA guidelines.

For existing projects established prior to January 2010:

2.a.i11 A risk self assessment has been carried out that determines what assessments, and mitigation plans, if any, need to be carried out in order to comply with the RSB standard

DCD Critorion	Scope and Requirements	 2.a.i12 If significant impacts are identified that would trigger a RESA or an ESIA, as per the ESIA guidelines, these have been completed in accordance with the guidelines. 2.a.i13 If a RESA or an ESIA is required as set out in 12.a.i12, a stakeholder engagement process has been completed in accordance with the RSB ESIA guidelines 2.a.i14 An ESMP has been completed and submitted in accordance with the ESIA guidelines and the RSB standard's requirements. 2.ai15 Where significant changes are necessary to the project operations, the ESMP is revised.
RSB Criterion	Scope and Requirements	Indicators
Criterion 2b. Free, Prior & Informed Consent (FPIC) shall form the basis for the process to be followed during all stakeholder consultation, which shall be gender sensitive and result in consensus-driven negotiated agreements.	 Operators who must comply: Feedstock Producer, Feedstock Processor and Biofuel Producer. Minimum requirements While FPIC provides the process conditions for stakeholder engagement and negotiated agreements, consensus shall be the decision-making tool applied in all cases and carried out in accordance with the RSB consensus building toolkit in the ESIA guidelines. Those responsible for undertaking the ESIA or RESA shall undertake and document a stakeholder analysis in accordance with the 	 If a RESA or an ESIA is required: 2.b.i1 A stakeholder analysis report is available that is in accordance with the ESIA stakeholder engagement guidelines. 2.b.i2 A stakeholder engagement process was in place which reflects the extent of the engagement and consultation necessary for the scale and intensity of the operations. 2.b.i3 The Operator has records of the stakeholder process, including the numbers of stakeholder meetings and attending participants along with comments, recommendations and consensus agreements from the meetings.

- RSB ESIA guidelines.
- The ESIA facilitators shall demonstrate that they have made every effort to invite all locally-affected stakeholders, local leaders, representatives of community and indigenous peoples groups and all relevant stakeholders to participate in the consultative process.
- The scope of engagement shall be determined by the scale of the operations as set out in the RSB ESIA guidelines.
- Participatory methodologies described in the RSB guidelines shall be used to ensure meaningful stakeholder engagement. Special attention shall be made to ensure that women. youth, indigenous and vulnerable people can participate meaningfully in meetings and negotiations, through, for instance, including women's groups, youth groups and issuebased groups in the stakeholder meetings, and holding separate meetings with such groups if necessary. Where the need is identified, through the ESIA process, in regions of vulnerability and inequality, the ESIA facilitator shall provide informal workshops to build local understanding in the community of the processes that may impact them directly to aid

- 2.b.i4 Where appropriate, participatory methodologies were used when engaging stakeholders
- 2.b.i5 Stakeholder meetings included representatives from all major stakeholder groups as defined by the UN unless legitimate reasons for non attendance of any stakeholder groups are provided.
- 2.b.i6 Special focus group meetings were held and documented with women and youth to elicit their responses and comments on the ESIA recommendations, the draft ESIR report and the draft ESMP reports
- 2.b.i7 Stakeholder meetings ensuring easy access, availability, understanding and accommodation of the needs of the local stakeholders were held as per ESIA stakeholder guidelines.
- 2.b.i8 Information for the meetings was provided in an open and transparent, timely way, prior to meetings and in a format (including language, style, presentation) that was appropriate for the particular stakeholder group or people or organizations who are to be engaged as per the ESIA stakeholder engagement guidelines.
- 2.b.i9 Information included was relevant to the project operations, and included all aspects of the project planning (including social, physical and economic planning elements) and potential social and environmental impacts
- 2.a.i10 The draft ESIR report was made available to stakeholders in a special meeting for this purpose and in a format and manner in keeping with local traditions and languages, literacy levels and requirements and

- meaningful engagement.
- Relevant government authorities shall be included in the stakeholder process to ensure efficient streamlining of the process with legal requirements.
- Documentation necessary to inform stakeholder positions shall be made freely available to stakeholders in a timely, open, transparent and accessible manner through distribution channels appropriate to the local conditions in accordance with the RSB ESIA guidelines.
- Management documents shall be publicly available, except where this is prevented by commercial confidentiality or where disclosure of information would result in negative environmental or social outcomes.
- The RSB ESIA guidelines for consensus-seeking shall be used, such that individuals or singleissue groups cannot block consensus. The RSB ESIA guidelines also provide tools for unblocking deadlocks and they shall be used in the event of a deadlock. In regions of poverty, where the ESIA identifies a significant potential for rights abuses through biofuel operations, the Operator shall provide independent legal advice for local and indigenous communities in the event that such services cannot be

- needs of the local people in accordance with the ESIA stakeholder engagement guidelines
- 2.b.i11 If information was withheld for any reason, legitimate reasons must be presented in the accompanying documentation
- 2.b.i12 Consensus was reached between the Operator and stakeholders on the recommendations in the ESIA report, on the draft ESIR and the ESMP.
- 2.b.i13 Consensus seeking was the main aim of the stakeholder engagement process, and where blockages or stalemates occurred, the Operator demonstrated attempts to address and unblock and arrive at consensus.
- 2.b.i14 If arbitration was necessary a report from the arbitrator is included in final documentation.
- 2.b.i 15 Legal advice for participants was organized where it was required in accordance with the ESIA guidelines.
- 2.ai16 The final ESIR submitted to the auditor for certification purposes indicates whether consensus was achieved as per 2.b.i11 and if there are dissenting views, these have been recorded with details on the dissenting parties and their reasons for dissension.

	provided by the state or are outside of the reaches of the affected stakeholders to afford such services.	
RSB Criterion	Scope and Requirements	Indicators
Criterion 2c. Biofuel	Operators who must comply: Feedstock Producer,	2.c.i1 The business plan is submitted as part of the documentation of the
Operators shall implement a	Feedstock Processor and Biofuel Producer.	ESIA process to the auditor.
business plan that reflects a commitment to long-term economic viability.	 Minimum requirements: Operators shall develop and implement a business plan that reflects a commitment to long-term economic viability which takes into account the social and environmental principles described in the RSB standard. This information shall be proprietary and shall not form part of the ESIA process. 	 2.c.i.2 The business plan integrates the cost of complying with the social and environmental requirements as per the ESIR and the ESMP. 2.c.i3 The Operator documents and implements a business plan that reflects a commitment to long-term economic viability. 2.c.i4 The business plan is integrated into the ESMP process where it is subject to monitoring and assessment as per the recorded agreements for both impacts assessment and progress reporting.

Principle 3: Greenhouse Gases

RSB Principle

Principle 3. Biofuels shall contribute to climate change mitigation by significantly reducing lifecycle GHG emissions as compared to fossil fuels.

RSB Criterion	Scope and Requirements	Proposed indicators
Criterion 3a. In geographic areas with legislative biofuel policy or regulations in force, in which biofuel must meet GHG reduction requirements across its lifecycle to comply with such policy or regulations and/or to qualify for certain incentives, biofuel	Operators who must comply: Feedstock Producer, Feedstock Processor, Biofuel Producer, and Biofuel Blender.	3.a.i1 The Operator has either calculated the GHG emissions of the biofuel using the applicable methodology or provided all necessary input data to the party that performs the calculations. 3.a.i2 The Operator keeps records of documentation and evidence to support the calculations and the data used or provided. 3.a.i3 The lifecycle GHG emissions of the biofuel meet the minimum required GHG reductions of the regulation, for the part of the value chain which the Operator is responsible.
operations subject to such policy or regulations shall		

comply with such policy and regulations and/or qualify for the applicable incentives.

RSB Criterion

Criterion 3b. Lifecycle GHG emissions of biofuel shall be calculated using the RSB lifecycle GHG emission calculation methodology, which incorporates methodological elements and input data from authoritative sources: is based on sound and accepted Science; is updated periodically as new data become available; has system boundaries from Well to Wheel; includes GHG emissions from land use change, including, but not limited to above- and below-

Scope and Requirements

Operators who must comply: Feedstock Producer, Feedstock Processor, Biofuel Producer, and Biofuel Blender.

Minimum requirements:

- The Operator shall report the lifecycle GHG emissions of the feedstock or biofuel using the RSB lifecycle GHG emission calculation methodology ("RSB methodology") to be published in a separate RSB GHG Calculation Methodology document.
- In certain instances where the RSB methodology is not available for a fuel pathway, the Operator shall report the lifecycle GHG emissions of the feedstock or biofuel using an alternative, RSB-listed methodology, as indicated in the RSB GHG Calculation Methodology document.
- Instead of reporting GHG emissions using RSB default values, an Operator may use the RSB calculations to determine more accurate GHG

Proposed Indicators

- 3.b.i1 The Operator has either (a) conducted all required calculations using the RSB calculation methodology **OR** the RSB-listed methodology that are applicable to her/his operations, **OR** (b) provided all necessary input data to the party that performs the GHG calculations.
- 3.b.i2. The Operator keeps records of documentation and evidence to support the calculations and the data used in the calculations for the RSB calculation methodology **OR** the RSB-listed methodology.
- 3.b.i3. **IF** the Operator used a GHG calculation other than the RSB methodology: The methodology chosen by the Operator is in the list of RSB-listed methodologies.
- 3.b.i4. **IF** the Operator used a GHG calculation other than the RSB methodology: The same methodology has been used for the entire supply chain of the biofuel up to the point where the Operator took ownership or possession.
- 3.b.i5. **IF** the Operator used calculated values: The Operator keeps records of documentation and evidence to support the calculations and the data used in the calculations.

ground carbon stock
changes; and incentivizes
the use of co-products,
residues and waste in such a
way that the lifecycle GHG
emissions of the biofuel are
reduced.

- emissions ("calculated values").
- When calculated values show better performance than RSB default values, the Operator shall provide, when requested, the qualitative or quantitative data upon which the calculated values are based.
- 3.b.i6 The Operator has reported the results of 3.b.i1 and 3.b.i5 to RSB.
- 3.b.i7 The Operator can demonstrate that they are seeking to minimize GHG emissions in the operations.
- 3.b.i8 The operations meet the GHG intensity requirements, as set out in the appropriate guidance document.

RSB Criterion

Criterion 3c. Biofuel shall have lower lifecycle GHG emissions than the fossil fuel baseline and shall contribute to the minimization of

overall GHG emissions.

Scope and Requirements

Operators Who Must Comply: Biofuel Blender.

Minimum requirements:

- Lifecycle GHG emissions of biofuel, calculated following the methodology in Criterion 3b, shall meet a minimum reduction (the "minimum GHG emission reduction threshold") below the applicable fossil fuel baseline; said threshold shall increase over time.
- During the pilot test period, not to exceed 9 months, testing will be done against minimum GHG emission reduction thresholds set at 10%, 40% and 70%.
- At the conclusion of the pilot test period, the initial minimum GHG emission reduction threshold shall be set such that it is significant and ambitious.

Indicators

- 3.c.i1 There is documented evidence that lifecycle GHG emissions of the biofuel, in gCO2e/MJ-fuel, have been calculated using the RSB GHG calculations tool and methodology. Documentation includes printouts of the results of the RSB Tool.
- 3.c.i2 For substitutes of gasoline fuel, the lifecycle GHG emissions of biofuel, in gCO2e/MJ-fuel, are lower than the gasoline baseline by the minimum GHG emission reduction threshold stated in Criterion 3c. For substitutes of diesel fuel, the lifecycle GHG emissions of biofuel, in gCO2e/MJ-fuel, are lower than the diesel baseline by the minimum GHG emission reduction threshold stated in Criterion 3c.

Note: The gasoline baseline and the diesel baseline are stated in the RSB Methodology document in gCO2e/MJ-fuel.

Principle 4: Human and Labor Rights

RSB Principle

Principle 4. Biofuel operations shall not violate human rights or labor rights, and shall promote decent work and the well-being of workers.

Principle 4. Bioluei operation	s shall flot violate human rights of labor rights, and shall p	nomote decent work and the wen-being of workers.
RSB Criterion	Scope and Requirements	Indicators
Criterion 4.a Workers shall enjoy freedom of association, the right to organize, and the right to collectively bargain.	 Operators who must comply: Feedstock Producer, Feedstock Processor and Biofuel Producer. Minimum requirements In countries where the law prevents collective bargaining or unionization, Operators shall not interfere with workers' own efforts to set up representational mechanisms in such cases, and shall provide a mechanism for workers to engage with employers without breaking the law. 	 4.a.i1 All workers have the right to freely organize, voluntarily negotiate their working conditions and bargain collectively with the company, as established in ILO Conventions 87 and 98. 4.a.i2 The Operator effectively informs personnel that they are free to join an organization of their choosing and that their doing so will not result in any negative consequences to them from the company. 4.a.i3 The Operator does not interfere with the establishment, functioning, or administration of such workers' organizations or collective bargaining. 4.a.i4 In situations where the rights to freedom of association and collective bargaining are restricted under law, the Operator allows workers to freely elect their own representatives, does not interfere with

RSB Criterion	Scope and Requirements	such representational mechanisms, and provides a mechanism for workers to engage with employers without breaking the law. Indicators
Criterion 4.b No slave labor or forced labor shall occur.	Operators who must comply: Feedstock Producer, Feedstock Processor and Biofuel Producer.	 4.b.i1 The Operator does not engage in or support the use of forced or compulsory labor as defined in ILO Convention 29. No forced, compulsory, bonded, trafficked or otherwise involuntary labor is being used by the Operator. 4.b.i2 No workers of any type are required to lodge their identify papers with anyone and no part of their salary, benefits or property is retained in order to force them to work or stay on the operation. 4.b.i3 Spouses and children of workers are not obliged to work in the operation.
RSB Criterion	Scope and Requirements	Indicators
Criterion 4.c No child labor shall occur, except on family farms and then only when work does not interfere with the child's schooling and does not put his or her health at risk.	 Operators who must comply: Feedstock Producer, Feedstock Processor and Biofuel Producer. Minimum requirements Schooling age limit is that defined in the national legislation or 14, whichever is higher. Hazardous child labor as defined by ILO Convention 138 is not allowed. Work by children on family small holdings is only 	 4.c.i1 Children of age 14 and under (or the legal national age) are not employed directly or indirectly by the operation. [Exceptions may be made in the case of family farms – see 4.c.i4 and 4.c.i5 below] 4.c.i2 Workers under the age of 18 do not undertake hazardous or dangerous work. In the case of family farms only: 4.c.i3 Where permitted by law, children between 12 and 14 years of age

	acceptable under adult supervision and when work does not interfere with the child's schooling nor puts at risk his or her health.	can work part time on family farms, only if they are family members or neighbors in a community where children have traditionally helped with agricultural work. 4.c.i4 Where children work on family farms, the work does not interfere with their educational, social or physical development and the work day including schooling, transport and work does not exceed 10 hours.
RSB Criterion	Scope and Requirements	Indicators
Criterion 4.d Workers shall be free of discrimination of any kind, whether in employment or opportunity, with respect to gender, wages, working conditions, and social benefits.	 Operators who must comply: Feedstock Producer, Feedstock Processor and Biofuel Producer. Minimum requirements Employees, contracted labor, small outgrowers, and employees of outgrowers shall all be free of discrimination as per ILO Convention 111. Career development shall be encouraged for all workers Work sites shall be safe for women; free from sexual harassment and other discrimination and abuse; and promote access to jobs, skills training, recruitment and career development for women to ensure more gender balance in work and career development. 	 4.d.i1 The Operator does not engage in, support or tolerate of any form of discrimination in hiring, remuneration, benefits, access to training, promotion, termination, retirement or any other aspect of employment, based on race, color, sex, religion, political opinion, national extraction, social origin, sexual orientation, family responsibilities, marital status, union membership, age or any other condition that could give rise to discrimination. 4.d.i2 The Operator does not engage in, support or tolerate the use of corporal punishment, mental or physical oppression and coercion, verbal or physical abuse, sexual harassment or any other kind of intimidation. 4.d.i3 The Operator does not engage in, support or tolerate any behavior that is threatening, abusive, exploitative, or sexually coercive, including gestures, language and physical contact in the workplace and where

applicable in residences and other facilities provided by the company for

П	
	RSB Criterion
	Criterion 4e. Workers' wage
	and working conditions shall
	respect all applicable laws
	and international
	conventions, as well as all
	relevant collective
	agreements. Where a
	government regulated
	minimum wage is in place in
	a given country, this shall be
	observed. Where a
	minimum wage is absent,
	the wage paid for a
	particular activity shall be
	negotiated and agreed on a
	annual basis with the
	worker. Men and women
	shall receive equal
	remuneration for work of

equal value.

Scope and Requirements

Operators who must comply: Feedstock Producer, Feedstock Processor and Biofuel Producer.

Minimum requirements:

- Wages shall be provided in cash or in another form acceptable to workers.
- Any housing provided by the Operator for permanent or temporary workers shall be built and maintained to ensure good sanitary, health, and safety conditions.
- For piecework (pay based on production rather than hours), the pay rate must allow workers to earn at least the legal minimum wage or comparable regional wage, whichever is higher, based on an eight-hour workday under average conditions.
- The maximum number of regular hours worked per week must not exceed 48. Workers may work overtime which shall be voluntary, but total working hours shall not exceed 80 per week.

Indicators

Minimum requirement:

use by personnel.

4.e.i1 The Operator pays all workers at least the government regulated minimum wage for the applicable work as required by law, which includes all mandated wages, allowances and benefits.

4.e.i2 Where a government regulated minimum wage does not exist, the biofuel producer has negotiated with the workers to establish an agreed wage and such agreements are in line with all applicable laws and international conventions and local collective agreements, where they exist.

4.e.i3 Men and women earn equal pay for equal work.

4.e.i4 For piecework, the pay rate allows male and female workers to earn at least the legal minimum wage for the specific work, based on the hourly rate if applicable or an eight-hour workday under average conditions.

4.e.i5 Wages are provided in cash or in another form acceptable to workers, and are paid at least monthly.

4.e.i6 No deductions from wages as a result of disciplinary measures are made.

		 4.e.i7 All collective agreements relating to pay, benefits and conditions of employment are upheld by the Operator. 4.e.i8 The maximum number of hours worked per regular week does not exceed 48. In exceptional circumstances (for instance during peak production periods), workers may choose to work an additional 32 hours per week of overtime. Overtime is voluntary and is paid according to legal or industry standards. 4e.i9 In cases of redundancies/lay-offs, economic compensation for workers is provided according to relevant national labor legislation. In the absence of national legislation, the labor contract for permanent and seasonal workers shall include a severance provision.
RSB Criterion	Scope and Requirements	Indicators
Criterion 4.f Conditions of occupational safety and health for workers shall follow internationally-recognized standards.	Operators who must comply: Feedstock producer, Feedstock processor and Biofuel producer. Minimum requirements Workers shall not be exposed to any occupational health or safety hazards without adequate protection and training as defined in national law and international standards.	 4.f.i1 The Operator has a health and safety policy which applies to all workers and is adequately implemented and monitored. 4.f.i2 The Operator has identified relevant health and safety risks and has effective procedures to address these risks. 4.f.i3 The Operator has accident and emergency procedures and instructions are clearly understood by all workers. Records are kept of all accidents and periodically reviewed. 4.f.i4 First aid kits, fire extinguishers, spill response material, and all other applicable and appropriate emergency response material is available at all

		4.f.i5 All workers are provided with and use appropriate personal protective equipment to protect them from all occupational health and safety hazards. 4.f.i6 All workers are adequately trained in the use of their protective clothing, interpretation of labels, preventative measures for reducing damage to health and the environment, emergency procedures, correct application, transport, storage and handling of hazardous substances and waste, and in all other procedures that pose an occupational health and safety risk or a risk to the environment. 4.f.i7 All workers are provide with access to clean toilet facilities, access to potable water, and where applicable sanitary facilities for food storage. 4.f.i8 Living quarters (for permanent or temporary workers) provided by the Operator are designed, built and regularly maintained to ensure safe and healthy conditions. Provision of infrastructure for sleeping, toilet/latrines, showers, and facilities for storing and preparing food are clean, safe, and meet the basic needs of the personnel and their families, and complies with legal requirements.
RSB Criterion	Scope and Requirements	Indicators
Criterion 4 g. Operators shall implement a mechanism to	Operators who must comply: Feedstock Producer, Feedstock Processor and Biofuel Producer.	4.g.i1 The Operator maintains up-to-date records of all contractors (and sub-contractors) whose personnel are working directly on the operation.

ensure the human rights and labor rights outlined in this principle apply equally when labor is contracted through third parties.

Progress requirements (required within three years of certification):

Operators shall identify instances where those working within the scope of their operational function (feedstock producer, feedstock processor, or biofuel producer) are contracted outside of the direct influence of the operation by external parties and shall implement a mechanism to ensure that such contracted workers are afforded the same rights as described in this principle as employed staff within the process. 4.g.i2 Contractors and subcontractors are subject to monitoring to confirm compliance with the requirements of Principle 4.

4.g.i3 The Operator maintains appropriate records that show that contractors and subcontractors adhere to the requirements of this principle. This shall include (but is not limited to): a contractual agreement and/or written commitment to conform to the requirements, participate in monitoring activities at the request of the company.

4g.i4 There is evidence of fair dealings with small scale farmers and local businesses.

Guidance for 4g.i4 This may include for example a publicly available pricing mechanism, evidence that contractual agreements are knowingly entered into, and that contracts are fair, legal and transparent, evidence that agreed payments are made in a timely manner etc.

Progress requirement 4.g.i5 The Operator is working with its suppliers and contractors to support the implementation of a mechanism that ensures the human rights and labor rights (as set out in Principle 4)of the subcontractor's suppliers and contractors are met..

Guidance for 4.g.i5 This indicator is referring to companies, organizations or individuals that are not part of the Operators direct supply chain, which may for example supply administrative goods & services to the Operator's suppliers, or products which do not enter the Operator's supply chain.

Principle 5: Rural and Local Development

RSB Principle

Principle 5. In regions of poverty, biofuel operations shall contribute to the social and economic development of local, rural and indigenous people and communities.

poverty, the socioeconomic status of local stakeholders impacted by biofuel operations shall be improved. Feedstock processor, Biofuel producer. Minimum requirements In regions of poverty: In areas where the socioeconomic baseline 5.a.i2 The Operator undertakes mitigation activities based on livelih	communities.		
poverty, the socioeconomic status of local stakeholders impacted by biofuel operations shall be improved. Feedstock processor, Biofuel producer. Minimum requirements In regions of poverty: In areas where the socioeconomic baseline 5.a.i2 The Operator undertakes mitigation activities based on livelih	RSB Criterion	Scope and Requirements	Indicators
identifies an excess of unemployed or underemployed labor in the locality of the operations, biofuel operations shall optimize the job creation potential. The Operator shall assess ways in which the use of permanent and local labor can be promoted and introduced over the use of identifies an excess of unemployed or underemployed labor in the locality of the livelihood activities such as farming, fishing, hunting, gathering, etc. 5.a.i3 There is evidence to show improvements of the socioeconom parameters identified in the baseline survey. Progress shall be revied least every 2 years. 5.a.i4 The Operator demonstrates every effort has been made to end the socioeconom parameters identified in the baseline survey. Progress shall be revied least every 2 years.	poverty, the socioeconomic status of local stakeholders impacted by biofuel operations shall be	 Feedstock processor, Biofuel producer. Minimum requirements In areas where the socioeconomic baseline survey undertaken during the ESIA process identifies an excess of unemployed or underemployed labor in the locality of the operations, biofuel operations shall optimize the job creation potential. The Operator shall assess ways in which the use of permanent and local labor can be promoted and introduced over the use of 	In regions of poverty: 5.a.i2 The Operator undertakes mitigation activities based on livelihood impacts and the socio-economic baseline survey, including for instance by allowing time during the workday or work week for subsistence and livelihood activities such as farming, fishing, hunting, gathering, etc. 5.a.i3 There is evidence to show improvements of the socioeconomic parameters identified in the baseline survey. Progress shall be reviewed at

- If it is determined through the ESIA or during the continuous ESIA assessment process that mechanization is the optimal choice from an environmental, economic, and social perspective, the transition from labor intensity to mechanization shall be done in a fair and equitable way for existing workers where as many of the existing workers as possible are retrained and employed in the mechanized process.
- Measured improvements in the social and economic indicators as set against the baseline survey carried out under the ESIA shall be targeted for review every two years.
- Skills training shall be provided by the Operator if necessary to ensure the implementation of this criterion.
- Mitigation measures for potential negative impacts shall be negotiated through the ESIA process.
- Cultural sensitivity and respect for existing social structures shall be applied in the development of options for compliance with this criterion.
- At least one measure to significantly optimize

away.

5.a.i5 The Operator provides skills training and/or other appropriate forms of assistance to local communities, to enable employment of local people in the operations. Records are kept to this effect.

5.a.i6 The Operator consults stakeholders on any plans for significant changes in management operations or organizational structure with potentially significant employment impacts.

5.a.i7 Where significant employment impacts are identified from efficiency improvements and modernization of production and processing (such as through mechanization), the Operator has a re-skilling plan in place and gives affected workers priority consideration for opportunities in other forms of employment within the operations.

5.a.i8 Within three years after initial certification, the Operator makes demonstrable contributions to local development based on the results of consultation with local communities, in accordance with the scale of the biofuel operations.

5a.i9 There is evidence of fair dealings with small-scale farmers and local businesses.

	the benefits to local stakeholders shall be implemented within a five year period of the start of the operations, and these include, but are not limited to the following: a. Creation of year round and/or long term jobs b. The establishment of governance structures that support empowerment of small scale farmers and rural communities such as co-operatives and micro credit schemes c. Use of the locally produced bio-energy to provide modern energy services to local poor communities d. Shareholding options, local ownership, joint ventures and partnerships with the local communities e. Social benefits for the local community such as the building or servicing of clinics, homes, hospitals and schools.	
RSB Criterion	Scope and Requirements	Indicators
Criterion 5b. In regions of poverty, special measures that benefit and encourage	Operators who must comply: Feedstock Producer, Feedstock Processor, Biofuel Producer	In regions of poverty: 5b.i1: The socioeconomic baseline survey undertaken in 5.a.i1 captures

the participation of women, youth, indigenous communities and the vulnerable in biofuel operations shall be designed and implemented.

5.b.1 Minimum requirements

 Data for rural poor women in regions of poverty shall be disaggregated in the base line social surveys to assist with the design of special programs for this sector

5.b.2 Progress requirements:

 Training and capacity building shall be required to give effect to this principle. Such training is required for both the workers and also for management that oversees employment protocols and supervision. issues and data that specifically relate to women, youth, indigenous communities and other vulnerable groups.

5b.i2: Where identified within the socioeconomic baseline survey and/or impact assessment, the Operator targets efforts or undertakes special measures that ensure benefits for women, youth, indigenous communities and other vulnerable groups.

The following is not applicable to small scale operations:

Progress requirements

5.b.i3 The Operator has an internal training program for management and workers aimed at building tolerance and fostering a working environment of equality for women, youth, indigenous communities and other vulnerable groups.

Principle 6: Food Security

RSB Principle				
Principle 6. Biofuel operations	Principle 6. Biofuel operations shall ensure the human right to adequate food and improve food security in food insecure regions.			
RSB Criterion	Scope and Requirements	Indicators		
Criterion 6a. Biofuel operations shall assess risks to food security in the region and locality and shall mitigate any negative impacts that result from biofuel operations.	 Operators who must comply: Feedstock Producer, Feedstock Processor and Biofuel Producer. Minimum requirements If the screening exercise of the ESIA process indicates that biofuel operations will involve a change in land ownership (rights) and take place in a region where food security is a risk, a full assessment shall be carried out according to the RSB food security guidelines. If the screening exercise described in the ESIA guidelines indicates that biofuel operations will not involve a change in land ownership (rights) but will take place in a region where food security is a risk, an RESA can be undertaken with a specialist assessment of the impact on 	 6.a.i1 The Operator has collected baseline data within the local foodshed of biofuel operations on food security, including availability, access, stability and utilization in accordance with the ESIA food security guidelines. 6.a.i2 The Operator has undertaken an assessment of the status of food security in the region in accordance with the RSB food security guidelines. Where food security has been identified as a risk: 6.a.i3 The Operator has undertaken a full food security impact assessment of the biofuel operations as part of the RESA or ESIA in accordance with the RSB food security guidelines to cover access, availability, stability and utilization and cross cutting issues such as labor, water, fuel, fodder and livelihood support. 6.a.i4 Appropriate parameters for measurement on an ongoing basis of 		

	 The scope of the impact assessment shall include additional impacts that the biofuel operations may have on cross-cutting requirements for food security including land, water, labor, and infrastructure. If the assessment indicates a food security risk as a result of biofuel operations, a mitigation plan shall be developed and implemented through the ESMP. The risk assessment shall identify potential positive impacts on local economic development that can be promoted through compliance with Principle 5 on Rural and Social Development. 	local food security have been identified, based on existing global and national food security indicators, specific risks identified by the Operator, and in accordance with the RSB food security guidelines. 6.a.i5 The Operator has analyzed the risks that biofuel operations pose to food security and has developed a food security risk mitigation plan based on the RSB food security guidelines, which forms part of the ESMP. 6.a.i6 The food security risk mitigation plan is effectively implemented according to the ESMP, such that food security impacts from biofuel operations are mitigated. 6.a.i7 Regular monitoring and analysis of food security is undertaken (as per the baseline parameters), including data on availability, access, stability and utilization of food. 6.a.i8 Opportunities that exist to increase local economic development through job creation and income generation have been optimized within the ESMP (cross cutting with principle 5)
RSB Criterion	Scope and Requirements	Indicators
Criterion 6b. In food insecure regions, biofuel operations shall enhance the local food security of the directly affected stakeholders.	Operators who must comply: Feedstock Producer, Feedstock Processor (when in the same region as the feedstock producer and processing energy-only crops) and Biofuel Producer. Minimum requirements In regions where food security is an ongoing	Applies only in food insecure regions and does not apply to small Operators 6.b.i1 Positive impacts on food security that may result from biofuel production have been identified, optimized and implemented through the ESMP. 6.b.i2 The Operator supports rural development and productivity

risk and concern, operations shall enhance food security of the locally affected community by, for instance, setting aside land for food growing, increasing yields, providing opportunities for workers to carry out household-level food production, sponsoring agricultural support programs and activities, and/or making value-added food byproducts available to the local market.

 Strategies to enhance regional food security shall be integrated with the rural and social development goals outlined in Principle 5. enhancement of farming through local investment or projects.

6.b.i3 The Operator provides direct and immediate access to food, or invests in projects that could deliver this benefit, for local food insecure people who are working in or involved with the biofuel operations.

6.b.i4 The Operator keeps records of all activities designed to enhance local food security (as set out in 6.b.i.2 and 6.b.i3), including types of support given, number of people/organizations receiving support and monetary value of support.

6.b.i5 Regular monitoring of the parameters identified in the ESMP are undertaken.

Principle 7: Conservation

RSB Principle

RSB Criterion

Principle 7. Biofuel operations shall avoid negative impacts on biodiversity, ecosystems, and other conservation values.

Criterion 7.a Conservation
values within the potential
or existing area of
operations shall be identified
through a land-use planning
process. Conservation values
of local, regional or global
importance within the
potential or existing area of

operation shall be

maintained or enhanced.

Scope and Requirements

Operators who must comply: Feedstock Producer, Feedstock Processor and Biofuel Producer.

Minimum requirements

- Operators shall evaluate the conservation value(s) of a potential or existing operation area following a land-use impact assessment, as detailed in the guidance.
- Biofuel operations shall occur in priority on areas with the lowest possible risk of impacts on people and the environment. Biofuel operations shall only happen on higher risk areas under limited conditions, which ensure that their conservation value(s) is/are maintained or enhanced.

Indicators

7.a.i1 The Operator has implemented a Land Use Planning Process to guide the identification of conservation values of global, regional or local importance, which is used for site selection (for projects established after 1 January 2009) and management of conservation values within existing operations, as per the ESIA guidelines, or an appropriate existing national or regional framework which provides equivalent information (e.g. a high conservation value toolkit).

7.a.i.2 Records of the Land Use Planning Process are available and include:

- Publically available map databases, used to identify and avoid existing protected areas and other features of high conservation value
- National/regional consultation with relevant experts and institutions to identify areas recognized for their conservation priority at

- Areas identified as "no-go areas" shall not be used for biofuel operations after the 1st of January 2009, unless feedstock production or processing operations are legally authorised as part of the conservation management for the area concerned.
- Pursuant to land-use impact assessment, areas that contain identified conservation values of global, regional or local importance, such as natural habitats, or that serve to maintain or enhance such conservation values (e.g. natural buffer zones) shall not be converted after the 1st of January 2009.
- Such areas shall only be used if adequate management practices maintain or enhance the identified conversation values (e.g. sustainable biomass harvesting).
- In case of new operations, conversion or use of areas shall not occur prior to the land use impact assessment.
- Hunting, fishing, ensnaring, poisoning and exploitation of rare, threatened, endangered and legally protected species shall not occur on the operation site.

- national/regional scale
- Consultation with local stakeholders to identify conservation values of local importance.
- For new projects, site level mapping, including delineation of areas to be planted and areas to be set aside for biodiversity protection, environmental service provision or traditional/community use
- For existing projects, site level mapping, including delineation of areas to be maintained or restored for biodiversity protection, environmental service provision or traditional/community use
- Description of conservation values of global, regional or local importance identified within the area, including those existing within or across the wider landscape,
- 7.a.i3 The written summary of screening, landscape assessment and site selection (where applicable) is made available in the public domain, to facilitate the regional mapping/identification of HCVs, KBAs, etc.
- 7.a.i4 There is documented evidence (including maps) to demonstrate that no operations have taken place or are planned within nationally protected areas, UNESCO world heritage sites, RAMSAR sites, or Alliance for Zero Extinction sites after1 January 2009.
- 7.a.i5 There is documented evidence (including maps) to demonstrate that areas including conservation values of global, regional or local

importance have not been converted after 1 January 2009.

7.a.i6 If conservation values of global, regional or local importance are identified in and around the potential or existing area of operations, specific measures are included in the ESMP to maintain or enhance these conservation values, including appropriate consideration of the wider landscape context.

Guidance for 7.a.i6: These measures include as appropriate: sustainable harvesting of the biomass existing on the site (e.g. thinning, mowing), the creation of conservation set aside zones, buffer zones, multiple use zones, controls on access and product removals, and specifically the control of hunting, fishing, ensnaring, poisoning and exploitation of rare, threatened, endangered and legally protected species.

7.a.i7 The Operator identifies and prioritizes use of areas which have the lowest risk of impacts on people and the environment.

7.a.i8 Monitoring to determine the effectiveness of the ESMP measures and the results of monitoring is implemented to inform future actions.

7.a.i9 There is documented evidence to demonstrate that conservation values of global, regional or local importance recorded after the Land Use Planning Process are maintained or enhanced after the 1st of January 2009.

7.a.i10 Operator re-evaluates conservation values every three years following the process described under 7.a.i.2

RSB Criterion	Scope and Requirements	Indicators
Criterion 7b. Ecosystem functions and services that are directly affected by biofuel operations shall be maintained or enhanced.	Operators who must comply: Feedstock Producer, Feedstock Processor and Biofuel Producer. Minimum requirements Following the land-use impact assessment (7a), Operators shall implement a management plan and practices that maintain ecosystem functions and services both inside and outside the operation site, which are directly affected by biofuel operations.	 7.b.i1 As part of the Land Use Planning Process or any equivalent process, ecosystem services and functions that are or may be directly affected by biofuel production are identified and recorded. 7.b.i2 Specific measures are included in the ESMP to maintain the ecosystem functions that are directly affected by biofuel production. Guidance for 7.b.i2: These measures may include: The creation or maintenance and protection of areas where natural regeneration processes are allowed to take place, and where populations of native plants and animals can breed, feed and find refuge, 7.b.i3 The Operator undertakes monitoring to determine the effectiveness of these measures and the results of monitoring are used to inform future actions. 7.b.i4 Specific measures are included in the ESMP to maintain these ecosystem services Guidance for 7.b.i5 These measures include: Actions to control and minimize disturbance to water quality and water flows e.g. the creation or protection of riparian buffer zones of natural vegetation, and the maintenance of natural vegetation in important water catchments, especially steep slopes.

operations shall protect, restore or create buffer zones.

Feedstock Processor and Biofuel Producer

Minimum requirements

- Buffer Zones shall be protected, restored or created to avoid negative impacts from biofuel operations on areas that are contiguous to the operation site.
- Within the operation site, buffer zones shall be protected, restored or created to avoid negative impacts from the biofuel operations on water courses, aquifers and any area that contains conservation value(s) of local, regional or global importance, and remain unused for biofuel operations.

around water courses, remaining areas of natural vegetation, areas set aside for conservation purposes, high conservation value areas, other protected areas and at the interface between the operations and the surrounding areas.

7.c.i.2 Buffer zones are designed according to the activities implemented for biofuel production, potential water recycling, and the type of areas they surround.

7.c.i3 Buffer zones are sufficient to prevent operations causing significant damage to areas within and outside of the production site.

Guidance for 7.c.i3

Examples:

- Buffer should be sufficient to minimize 'edge effects' (such as
 microclimatic effects and human disturbance) in areas set aside for
 conservation, to the extent that these might degrade the conservation
 value of the area.
- Buffer should be sufficient to ensure that soil run-off or the drift of chemical sprays is effectively prevented from entering streams and water courses.

7.c.i4 All buffer zones are effectively maintained, and remain un-planted with biofuel crops; the vegetational composition of buffer zones may however be managed in order to contribute to the sustained supply of environmental goods and services, in line with their protective function.

RSB Criterion	Scope and Requirements	Indicators
Criterion 7d. Ecological corridors shall be protected, restored or created to minimize fragmentation of habitats.	 Operators who must comply: Feedstock Producer, Feedstock Processor and Biofuel Producer. 7.d.1 Minimum requirements Ecological corridors within the production site should be set-aside and protected with appropriate surrounding buffer zones and in no case exploited after the 1st of January 2009. Whenever the production site impairs the connectivity between surrounding ecosystems, ecological corridors shall be created by the Operator. 7.d.2 Progress requirements (non small-scale Operators only) New ecological corridors shall be created within the production site if it is surrounded by areas containing wildlife. Any ecological corridor destroyed between the 	7.d.i1 Where there is the risk that operations would have increased the fragmentation of natural ecosystems, the spatial layout is designed to minimize this fragmentation and maintain connectivity of ecosystems. 7.d.i2 The design and spatial layout of conservation zones maximizes their contribution to the conservation of biodiversity, through the creation of corridors and the consolidation of natural areas as appropriate. 7.d.i.3 The Operator has identified and protected any fixed migration, commuting and reproductive corridors occurring naturally within the operational site. 7.d.i4 The Operator does not exploit conservation zones for agricultural production. 7.d.i5 The Operator has defined and implemented specific management activities designed to protect or enhance biodiversity within these conservation zones. Progress requirements (Medium and large Operators only) 7.d.i6 Where the operations are surrounded by natural vegetation, specific measures are implemented to establish conservation zones that
	1st of January 2004 and the 31st December 2009 on or near the production site and for which the Operator is directly accountable shall	reduce the effects of fragmentation and promote the movement of wildlife outside the production site. 7.d.i7 Where the Operator was directly responsible for the removal of

	be restored.	natural vegetation, between 1st of January 2004 and the 31st December 2009, and this removal has increased fragmentation of natural ecosystems, specific measures are implemented to restore this natural vegetation and its ecological function (connectivity).
RSB Criterion	Scope and Requirements	Indicators
Criterion 7e. Biofuel operations shall prevent invasive species from invading areas outside the operation site.	 Operators who must comply: Feedstock Producer and Feedstock Processor. Minimum requirements Operators shall not use any species officially prohibited in the country of operation., Whenever the species of interest is not prohibited in the country of operation, Operators shall seek adequate information about the invasiveness of the species to be used for feedstock production, e.g. in the Global Invasive Species Database (GISD)¹. If the species is recorded as highly invasive under similar conditions (similar climate, and similar local ecosystems, and similar soil types), this species shall not be used. If the species has not been recorded as representing a high risk of invasiveness under 	7.e.i1 There is evidence that no crops officially prohibited at a national or regional level, because of high risk for invasiveness or recorded as highly invasive under similar conditions (similar climate, and similar local ecosystems, and similar soil types) are used commercially by the Operator. Where a crop has not been historically cultivated at a large scale in the area of operation: 7.e.i2 There is documentary evidence that the Operator has sought adequate information about the invasiveness of the species to be used for feedstock production, e.g. in the Global Invasive Species Database (GISD). 7.e.i3. Where the species has not been recorded as representing a high risk of invasiveness under similar conditions (climate, local ecosystems, soil type), the Operator a Weed Risk Assessment (WRA) has been carried out determining the extent to which the crop poses a high risk of invasiveness in the local context.

¹ http://www.issg.org/database

similar conditions (climate, local ecosystems, soil type), Operators shall follow the specific steps:

- 1) During the feedstock selection and development, Operators shall conduct a Weed Risk Assessment (WRA) to identify the potential threat of invasion. If the species is deemed highly invasive after the Weed Risk Assessment, this species shall not be used.
 2) During the potential importation of crops, Operators shall comply with all related national regulations, including the gain of an official approval or a suitable import certificate.
- 3) During feedstock production, Operators shall set up a management plan, which includes cultivation practices that minimize the risks of invasion, immediate mitigation actions (eradication, containment or management) in case of escape of a plant species outside the operation site (possibly through the provision of a specific fund), as well as a monitoring system that checks for escapes and the presence of pests and pathogens outside the operation site.
 4) During harvesting, processing, transport and trade, Operators shall contain propagules in an appropriate manner on site and during transport.

7.e.i4 There is evidence that no crops identified in the WRA as a high risk of invasiveness under local conditions, are used commercially by the Operator.

7.e.i5 The Operator is implementing the IUCN Guidelines on Biofuels and Invasive Species or any equivalent national guideline that exists in the country of operation.

7.e.i6 The ESMP includes cultivation practices that minimize the risks of invasion, immediate mitigation actions (eradication, containment or management) in case of escape of a plant species outside the production site.

7.e.i7 The Operator contain propagules in an appropriate manner during harvesting and processing, on site and during transport.

7.e.i8 Monitoring is carried out to detect any un-wanted spread of commercial crops. This monitoring informs a control program that ensures prompt and effective action is taken to eliminate the species from sites where it may regenerate.

7.e.i9 When importing planting material or biological material for processing, the Operator complies with all related national regulations, including official approval or import certificates required.

7.e.i10 For projects established after 1 January 2009, the Operator has cultivated indigenous or naturalized crops, where exotic crops have a lower yield and environmental and/or social performance compared to indigenous or naturalized crops.

Principle 8: Soil

RSB	Prin	cip	le
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Principle 8: Biofuel operations shall implement practices that seek to reverse soil degradation and/or maintain soil health.

RSB Criterion	Scope and Requirements	Indicators
Criterion 8a. Operators shall implement a soil management plan designed to maintain or enhance soil physical, chemical, and biological conditions.	 Operators who must comply: Feedstock Producer. 8.a.1 Minimum requirements: Soil erosion shall be minimized through the design of the feedstock production site and use of sustainable practices (including, for example, crop rotation, direct planting, maintaining vegetative ground cover, terracing, and maintaining or creating tree hedges) in order to enhance soil physical health on a watershed scale. None of the chemicals recorded in the WHO's 1a and 1b lists shall be used (see also Principle 11). 	8.a.i1 The Operator has adequate Information on the physical, chemical and biological properties of the soils in and around the production area (from ESIA or other source). 8.a.i2 The Operator has a plan for managing soils, as part of the ESMP, adapted to the local context (i.e. rainfall, water availability, etc.) and to the scale and intensity of operations, which includes measures to minimize soil compaction and erosion and to maintain or improve levels of soil organic matter and nutrients. 8.a.i3 The Operator has procedures for all activities which impact on soils (e.g. site preparation, harvesting), based on best practice approaches for soil management (see Annex for more details).

The use of agrarian and forestry residual products for feedstock production, including lignocellulosic material, shall not be at the expense of long-term soil stability and organic matter content.

For others than small-scale Operators:

- A soil management plan shall be implemented that includes practices that prevent or reverse degradation over the long term
- Periodic sampling of soil on the feedstock production site shall be performed to evaluate the effect of implemented practices on the organic matter content. Where such practices are not maintaining soil organic matter at the optimal level, alternative practices shall be investigated.

For small-scale Operators only:

 Small-scale Operators shall implement practices aiming to maintain or enhance soil organic matter on the feedstock production site.

8.a.2 Progress requirements:

 For annual crops, Operators shall implement measures to improve soil health, such as Conservation Agriculture practices as defined 8.a.i4 Plans and procedures are fully implemented in the field through the design of the plantation or the production site and sustainable practices (including, for example, crop rotation, direct planting, maintaining vegetative ground cover, terracing and maintaining or creating tree hedges). The Operator provides evidence of the relevancy of the practices implemented to reach the objective of this criterion.

8.a.i5 The Operator undertakes monitoring of soil organic matter at a scale and frequency that allows the results to inform operational planning.

8.a.i6 Where there is deterioration in soil physical, chemical or biological properties, actions are taken to mitigate the cause.

8.a.i7 Where agricultural or forestry residues are utilized for biofuel production, there is no evidence that this is resulting in deterioration in soil chemical or physical properties.

Progress requirements 8.a.i7 Non small-scale Operators cultivating annual crops implement Conservation Agriculture practices such as organic direct planting, permanent soil cover, crop rotation or other appropriate activities.

For small-scale Operators:

8.a.i8 Small-scale Operators demonstrate a general understanding of the soil erosion issues and organic matter content in the area of production, the influence of operations on these aspects and the by the FAO, including but not limited to:

- a. Organic direct planting
- b. Permanent soil cover
- c. Crop rotation
- d. Fallow areas with natural or planted vegetation in order to recover natural fertility and interrupt pest life cycles
- For perennial crops, none of the chemicals recorded in the WHO's 1a and 1b lists, in Annex III of the Rotterdam Convention and in the Stockholm Convention on POPs shall be used within 3 years after certification (See full guidance on chemicals under principle 11).

practices ensuring their maintenance or enhancement.

8.a.i9 Small-scale Operators undertake practices aiming to minimize erosion and compaction, and to maintain or improve soil organic matter are being implemented in the field.

Principle 9: Water

RSB Principle

Principle 9. Biofuel operations shall maintain or enhance the quality and quantity of surface and ground water resources, and respect prior formal or customary water rights.

RSB Criterion	Scope and Requirements	Indicators
Criterion 9a. Biofuel operations shall respect the existing water rights of local and indigenous communities.	 Operators who must comply: Feedstock Producer, Feedstock processor, Biofuel Producer. Minimum requirements: The use of water for biofuel operations shall not be at the expense of the water needed by the communities that rely on the same water source(s) for subsistence. Water resources under legitimate dispute shall not be used for biofuel operations until any legitimate disputes have been settled through negotiated agreements with affected stakeholders following a free, prior and informed consent enabling process. 	 9.a.i1 Water users within the watershed of the biofuel production operation have been assessed and documented according to the Environmental and Social Impact Assessment (ESIA) water rights guidelines. 9.a.i2 Existing water rights, both formal and customary/informal, prior to operations have been established. 9.a.i3 Water usage rights and access by local and indigenous communities are ensured and protected through the environmental and social management plan (ESMP) and the water management plan which ensures that biofuel production does not have any negative impact on the other users

For others than small-scale Operators:

- As part of the Environmental and Social Impact
 Assessment (ESIA) outlined in Principle 2, a
 consultative process that includes water
 regulatory authorities, local water experts,
 community members, and indigenous peoples
 relying on the same water table or watercourse
 for their needs shall be used to identify
 downstream or groundwater users and
 determine the formal or customary water rights
 that exist, as well as critical aquifer recharge
 areas, replenishment capacities of local water
 tables, watercourses, and ecosystem needs. The
 potential impacts of biofuel operations on any of
 these aspects shall be evaluated, and any
 negative impacts mitigated.
- Any formal or customary water rights that exist shall be respected and protected through the water management plan (see 9.b) to prevent infringement of such rights. No modification of the existing rights can happen without the Free Prior and Informed Consent of the parties affected.

For small-scale Operators only:

9.a.i4 The Operator does not use water which is subject to an unresolved legitimate dispute in accordance with the ESIA water rights guidelines.

9.a.i5 Where there has been a legitimate dispute, this has been settled through free, prior and informed consent and negotiated settlements with the affected stakeholders according to the stakeholder management and dispute resolution process of the ESIA guidelines.

9.a.i6 There are no unresolved legitimate water rights dispute regarding water rights or allocation licenses that have been granted to biofuel production.

9.a.i7 All required government regulated licenses and formal allocation processes have been completed and are valid.

9.a.i8 The requirement for water for ecosystems and to sustain biological life within the watershed of the operations have been established according to the ESIA ecological and water specialist study guidelines.

9.a.i9 Water management requirements for maintenance of critical aquifer recharge areas, replenishment capacities of local water tables, watercourses, and ecosystem needs are ensured and protected through the environmental and social management plan (ESMP) and the water management plan which ensures that biofuel production does not have any negative impact.

	The potential impacts of biofuel operations on water availability within the local community and ecosystems shall be assessed by the Operator, and any negative impacts mitigated.	9.a.i8 A Rapid environmental and Social Impact assessment indicates that there will be no significant removal of water rights for both people and ecosystems as a result of the biofuel production 9.a.i8 The ESMP ensures that any negative impacts have been adequately mitigated.
RSB Criterion	Scope and Requirements	Indicators
Criterion 9b. Biofuel operations shall include a water management plan which aims to use water efficiently and to maintain or enhance the quality of the water resources that are used for biofuel operations.	 Operators who must comply: Feedstock producer, Feedstock Processor and Biofuel Producer. 9.b.1 Minimum requirements Operators shall implement a water management plan. The water management plan shall be made available to the public, unless limited by national law or international agreements on intellectual property. The water management plan shall be consistent with local rainfall conditions not contradict any local or regional water management plans and include the neighbor areas, which receive direct runoff from the operation site. Any negative impact on these neighbor areas shall be 	9.b.i1 The Operator has adequate Information on the physical, chemical and biological properties of the water resources in and around the production area (from ESIA or other source). 9.b.i2 The Operator has a water management plan (or equivalent documentation), adapted to the local context (i.e. rainfall, water availability, etc.), and adapted to the scale and intensity of the operation which is consistent with any regional or local water management plans and reviewed at least annually. 9.b.i3 The water management plan: a. Identifies all steps where water withdrawal, discharge and potential runoff occur over the operation, with a description of the techniques used related to water extraction, transport, and

mitigated.

 The Operator shall undertake an annual monitoring of the success of the implementation of the water management plan.

9.b.2 Progress requirements:

 The water management plan shall include steps for reusing or recycling waste water, appropriate to the scale and intensity of operation. discharge, and the most critical steps where these activities occur.

- b. Includes an estimate of any water volume received from the public provision system or withdrawn from the water table or a tank through the production chain, and identifies the source of withdrawal.
- c. Includes an estimate of potential runoff nature and volumes through the production chain and the natural compartment or collectors affected by these runoffs.
- d. Includes measures to reduce water consumption and contamination at the most critical steps.
- e. Is publicly available

9.b.i4 Where the ESIA demonstrates that operations pose a risk of water depletion or water contamination, there has been consultation with local experts, affected local communities, relevant water use committees and/or any other relevant stakeholders on the volume and timing of planned water use, and, for non small-scale Operators, records of the outcomes of the consultations are available.

9.b.i5 Where the ESIA demonstrates that operations pose a risk of water depletion, planned water use is based on the outcomes of a consultation process and designed to ensure that the operations do not contribute to exceeding the replenishment capacity of the water

table(s), water course(s) or water tank(s) use for operations.

9.b.i6: There is evidence that the water management plan (or equivalent) is fully implemented..

9.b.i7: There is an annual monitoring program (which forms part of the water management plan) including all steps where water withdrawal, discharge and runoffs occur.

9.b.i8: The results of monitoring are analyzed and reviewed, and changes in water consumption and quality are measured to assess, with clear justification, the effectiveness of the water management plan. Where negative impacts are observed, mitigation plans developed and integrated into the water management plan.

Progress requirements 9.b.i9 The Operator has implemented a water management plan which includes steps for reusing or recycling waste water, appropriate to the scale and intensity of production.

Small-scale Operators:

9.b.i10 Small-scale Operators demonstrate a general understanding of the water contamination and depletion issues in the area of production, the influence of operations on these aspects and the adapted monitoring and mitigation practices.

9.b.i11 Small-scale Operators identify all steps where water withdrawal, discharge and potential runoff occur over the operation, and

RSB Criterion	Scope and Requirements	undertakes measures to reduce water consumption and contamination at the most critical steps. Indicators
Criterion 9c. Biofuel operations shall not contribute to the depletion of surface or groundwater resources beyond replenishment capacities.	 Operators who must comply: Feedstock Producers, Feedstock Processors, Biofuel Producers. 9.c.1 Minimum requirements: Water used for biofuel operations shall not be withdrawn beyond replenishment capacity of the water table, watercourse, or tank from which the water comes. The replenishment capacity shall be evaluated through the Scoping Exercise or the Environmental and Social Impact Assessment (Water Specialist guideline) outlined in Principle 2. Based on the Scoping Exercise or the Environmental and Social Impact Assessment outlined in Principle 2 and the water management plan (9.b), the use and share of water resources (e.g. maximum volume to be annually withdrawn from the water table) for biofuel operations shall be defined in agreement with local experts and the community; any water user committees shall be consulted. Irrigated biofuel crops and freshwater-intensive 	9.c.i1 The Operator demonstrates a general understanding of the replenishment capacity of any water body from which water is being taken, the influence of their operations on this capacity and the practices ensuring this capacity is not impaired. 9.c.i2 There is no evidence that operations are contributing to exceed the replenishment capacity of the water table(s), water course(s) or water tank(s) used for operations. 9.c.i3 The volume of water being used in operations does not exceed the planned volumes. 9.c.i4 Use of water from natural water bodies does not result in any permanent change in the natural status of the water body. (Non small-scale Operators). 9.c.i5 In areas where there is long-term water stress, the Operator does not use irrigation used unless it can be demonstrated that there is no negative impact on water levels. 9.c.i6 In areas which become water-stressed after certification, the Operator implements good practices which minimize the use of water. Progress requirement 9.c.i7 The-Operator is implementing water saving

	biofuel operations systems shall not be established in long-term freshwater-stressed areas, unless the implementation of: a. good practices or b. an adequate mitigation process that does not contradict other requirements in this standard ensures that the water level remains stable. Operators shall not withdraw water from natural watercourses (e.g. a river) to an extent that modifies its natural trajectory or the physical, chemical and biological equilibrium it had before the beginning of operations. 9.c.2 Progress requirements: The Operator shall demonstrate commitment to the improvement of water efficiency over time through the implementation of water-saving practices, including but not limited to rain water harvesting.	practices and the water efficiency of operations is continuously improved.
RSB Criterion	Scope and Requirements	Indicators
Criterion 9d. Biofuel operations shall contribute to the enhancement or maintaining of the quality of the surface and	Operators who must comply: Feedstock Producer, Feedstock Processor and Biofuel Producer. 9.d.1 Minimum requirements: Biofuel operations shall not occur on a critical	9.d.i1 The Operator has identified all risks the operations pose to potential contamination of water (physical, chemical or biological).9.d.i2 Biofuels are not being produced or processed in critical aquifer recharge areas without official authorization from relevant authorities.

groundwater resources.

- aquifer recharge area without a specific authorization from legal authorities.
- Operators shall implement the best available practices which aim to maintain or enhance the quality of surface and ground water resources that are used for biofuel operations to the level deemed optimal for the local system for sustained water supply, ecosystem functioning and ecological services; this optimal level is to be defined, as part of the ESIA (PC2), through the consultation of local experts, communities and producers, taking into account local economic, climatic, hydrologic and ecologic conditions.
- Adequate precautions shall be taken to contain effluents and avoid runoffs and contamination of surface and ground water resources, in particular from chemicals and biological agents.
- Buffer zones shall be set between the operation site and surface or ground water resources.

9.d.2 Progress requirements:

For existing operations, degradation of water resources that existed prior to certification and for which the Operator is directly accountable shall be reversed. Wherever applicable, Operators (except small-scale Operators) shall participate in projects that aim to improve water 9.d.i3. The Operator takes adequate precautions to contain effluents and avoid runoffs and contamination of surface and ground water resources, in particular from chemicals and biological agents.

9.d.i4 There is no conclusive evidence that operations are contributing to contamination of the water table(s), water course(s) or water tank(s) used for operations.

Progress requirement 9.d.i5 Where water degradation occurred prior to certification, the Operator is undertaking measures to reverse the impacts on water quality caused by their operations.

Progress requirement 9.d.i6 The Operator ensures that any wastewater or runoff that may contain organic or mineral contaminants which have the potential to have negative impacts on humans, wildlife and natural ecosystems is treated.

quality at a watershed scale.

- Waste water or runoff that contains potential organic and mineral contaminants shall be treated or recycled to prevent any negative impact on humans, wildlife, and natural compartments (water, soil).
- None of the chemicals recorded in the WHO's 1a and 1b lists, in Annex III of the Rotterdam Convention or in the Stockholm Convention on POPs shall be used within 3 years after certification (See full guidance on chemicals under principle 11).

Principle 10: Air

RSB Principle

Principle 10. Air pollution from biofuel operations shall be minimized along the supply chain.

Filliciple 10. All pollution in	on biorder operations shall be millimized along the suppr	y Cilaiii.
RSB Criterion	Scope and Requirements	Indicators
Criterion 10a. Air pollution emission sources from biofuel operations shall be identified, and air pollutant emissions minimized through an air management plan.	Operators who must comply: Feedstock Producer, Feedstock Processor and Biofuel Producer. 10.a.1 Minimum requirements: An emission control plan appropriate to the scale and intensity of operations shall be in place regarding major air pollutants including carbon monoxide, nitrogen oxides, volatile organic compounds, particulate matter, sulphur compounds, dioxins and other substances recognised as potentially harmful for the environment or human health. The plan shall identify all potential air pollution sources and describe their nature (e.g. open burn, boiler stack). The plan shall describe any air pollution	10.a.i1 The Operator has identified and documented potential air pollutants and their source. 10.a.i2 An emission control plan (or equivalent documentation), appropriate to the scale and intensity of production has been developed and implemented. 10.a.i3 A monitoring program, appropriate to the scale and intensity of potential emissions, is fully implemented and the results of monitoring are analyzed and reviewed and, where negative impacts are observed, mitigation plans developed and integrated into the emission control plan. Progress requirement 10.a.i4 The Operator has investigated and implemented as far as possible any opportunities for implementing local

	 mitigation strategies that are employed, or else the rationale for not utilizing such strategies. 10.a2 Progress requirements: The Operator shall investigate and, whenever possible in the local context, implement Best Available Technology (BAT) to reduce air pollution, appropriate to the scale and intensity of operation. 	BMP or BAT to reduce air pollution.
RSB Criterion	Scope and Requirements	Indicators
Criterion 10b. Biofuel operations shall avoid and, where possible, eliminate open-air burning of residues, wastes or byproducts.	 Operators who must comply: Feedstock Producers, Feedstock Processors and Biofuel Producers 10.b.1 Minimum requirements: A plan shall be put in place to phase out any open-air burning of leaves, straw and other agricultural residues within three years following certification. If workers' health and safety is at stake (for instance in manual sugarcane harvesting) or when no viable alternative is available or affordable in the local context, if burning may prevent natural fires, or if the cultivation of the crop periodically requires burning for viability in the long term without any equivalent alternatives (e.g. switch grass), 	I0.b.i1 If any open-air burning of agricultural wastes or by-products occurs, evidence is available that there is no viable alternative available or affordable in the local context. I0.b.i2 If open-air burning occurs there is a plan to phase out burning within three years from certification, except in cases set out in the guidance. I0.b.i3 Where burning is utilized, there is a fire management plan (or equivalent documentation), which include sensitization or training of staff (Non small-scale Operators only) and procedures, appropriate to the scale and intensity of burning, which comply with all legal requirements and are based on best practice to minimize the environmental, health and safety risks. I0.b.i4 For large-scale OOperators, keeps record of all burning, including

limited open-air burning practices may occur.

10.b.2 Progress requirements:

 Open air burning of agricultural residues and byproducts shall not occur following the phase-out plan (10.b.1). any accidents or spread of fire outside the designated area. All such incidents are reviewed, mitigation approaches identified, and the fire management plan and procedures amended.

Progress requirement 10.b.i5 The Operator is generating electricity and/or heat from burning or fermentation **or other process** of any wastes and by-products, appropriate to the scale and intensity of the operation. Such burning or fermentation **or other process** occurs in an appropriate infrastructure to minimize air pollution.

10.b.i6 The Operator has undertaken all infrastructure improvements necessary to meet national minimum requirements for emissions of air pollutants.

Progress requirement 10.b.i7 No open-air burning of agricultural residues and/or by-products is undertaken, except in cases set out in the guidance.

Principle 11: Technology

RSB Principle

Principle 11. The use of technologies in biofuel operations shall seek to maximize production efficiency and social and environmental performance, and minimize the risk of damages to the environment and people.

RSB Criterion	Scope and Requirements	Indicators
Criterion 11a. Information on the use of technologies in biofuel operations shall be fully available, unless limited by national law or international agreements on intellectual property.	 Operators who must comply: Feedstock Producer, Feedstock Processor and Biofuel Producer. Minimum requirements When complying with and auditing against this criterion, proprietary technology shall be protected from competitors and intellectual property rights shall be respected The Operator shall disclose potential hazards related but not restricted to Genetically Modified Organisms (GMO) when such technology is used, and make this information available to the public upon request. The 	11.a.i1 The Operator provides information on request regarding the use of technologies in biofuel operations, except for proprietary technology which is protected by intellectual property rights or by law. 11.a.i2 Following the risk assessment (see 11.bi1), the Operator has put information in the public domain and notified any potentially affected parties about potentially hazardous technologies used in biofuel operations, including but not restricted to GMOs. This includes disclosure of any foreseeable impacts on human health and the environment. 11.a.i3 The Operator has consulted the Biosafety Clearinghouse to identify country decisions and declarations on GMO technologies used. All decisions and declarations are documented.

Biosafety Clearinghouse established under the Cartagena Protocol on Biosafety shall be consulted to provide information about specific GMOs, including related risk and countries' decisions regarding that technology.

For small-scale farmers and small feedstock producers:

11.a.i4 Any parties potentially affected by hazardous technologies used in biofuel operations, including but not restricted to GMOs, are aware of the technologies being used and the potential hazards.

RSB Criterion

Scope and Requirements

Indicators

Criterion 11b. The technologies used in biofuel operations including genetically modified: plants, micro-organisms, and algae, shall minimize the risk of damages to environment and people, and improve environmental and/or social performance over the long term.

Operators who must comply: Feedstock Producer, Feedstock Processor and Biofuel Producer.

Minimum requirements

- The use of genetically modified organisms shall follow relevant national or international guidelines, laws and agreements, crop-specific stewardship systems, and local and community coexistence agreements or understandings.
- For new operations, Operators shall provide evidence that the hazardous technologies they use do not contradict any of the RSB principles and criteria before the beginning of operations.
- Operators using GMOs shall take measures to prevent migration of genetically modified material and shall cooperate with neighbours, regulatory and conservation authorities, and local stakeholders to implement monitoring

11.b.i1 The Operator has undertaken a risk assessment of all technologies used in biofuel operations, or uses an existing risk assessment undertaken by government or any independent expert.

- 11.b.i2 No potentially hazardous technology is used by the Operator without a demonstrated understanding of the potential impacts and capacity to monitor, prevent and mitigate the impacts caused by such technology to people and the environment.
- 11.b.i3 For technologies identified as potentially hazardous, the Operator can demonstrate that such use is in strict compliance with national laws and internationally accepted scientific protocols.
- 11.b.i4 For technologies identified as potentially hazardous, there is justification for use, including evidence of clear positive impacts on environmental, social or economic aspects within the operation and the local area. Positive impacts are measured against common practices in the local context.
- 11.b.i5 For technologies identified as potentially hazardous,

DSD Critorion	and preventative measures. Crop-specific and technology-specific mitigation strategies shall be utilized. For new operations, feedstock producers shall use indigenous crops whenever alternative crops reduce yield and/or environmental and/or social performance compared to indigenous crops.	comprehensive records of use are maintained, and the impacts of such use are closely monitored and mitigated. Genetically modified organisms: 11.b.i6 Any Genetically Modified Organism is used by the feedstock producer according to the existing regulation in the country of operation. 11.b.i7 If no regulation exists or if the existing regulation does not include provision for monitoring and mitigation of GMOs in the country of operation, the feedstock producer has implemented a monitoring and mitigation strategy, including a qualified and documented scientific risk assessment and risk management guidelines based on the Biosafety Clearinghouse (BCH – Cartagena Protocol) and other existing legislation and guidelines. 11.b.i8 If Genetically Modified Organisms are used, preventative measures have been taken by the feedstock producer against migration of genetically modified material outside of the operation. 11.b.i9 If Genetically Modified Organisms are used, the feedstock producer cooperates with neighbors, regulatory and conservation authorities, and local stakeholders to conduct monitoring and prevent gene migration.
RSB Criterion	Scope and Requirements	Indicators
Criterion 11c. Micro-	Operators who must comply: Feedstock Processor	11.c.i1 If class 2, 3 or 4 micro-organisms are used, the Operator exercises

organisms used in biofuel	and Biofuel Producer.	engineering control measures at source including adequate tests and
operations which may represent a risk to the	Minimum requirements	maintenance of control measures and equipment. The frequency of examination and testing will depend on the nature of the organism and
environment or people shall be adequately contained to prevent release into the environment.	 In no case shall genetically modified microorganisms or any micro-organisms that pose a risk (pathogenic, mutagenic, contaminant, etc.) to human health or the environment be released outside the processing/production unit. Any such organism used for processing shall be destroyed or adequately neutralised (i.e. loss of any potentially hazardous character) before being disposed of. The Operator shall implement a plan that includes adequate monitoring and an emergency procedure in case of accidental dissemination of any such micro-organisms into the environment. 	the product. 11.c.i2 If class 2, 3 or 4 micro-organisms are used, personnel have adequate training and experience in storage, handling, use, disposal and emergency procedures for micro-organisms. 11.c.i3 If class 2, 3 or 4 micro-organisms are used, the Operator has an emergency plan for handling accidents and unexpected events for contained uses, where the failure of the containment measures could lead to serious danger to humans and/or the environment. 11.c.i4 If class 2, 3 or 4 micro-organisms are used, there is documented evidence that no viable micro-organisms have been detected outside the processing equipment.
RSB Criterion	Scope and Requirements	Indicators
Criterion 11d. Good practices shall be implemented for the storage, handling, use, and disposal of biofuels and chemicals.	Operators who must comply: Feedstock Producer, Feedstock Processor and Biofuel Producer. 11.d.1 Minimum requirements None of the chemicals recorded in the WHO's 1a and 1b lists shall be used. The use of	 11.d.i1 There is no storage or use of any chemicals recorded in the WHO's 1a and 1b lists. 11.d.i2 A plan is implemented to eliminate the use of chemicals listed in the Stockholm Convention or in Annex III of the Rotterdam Convention within three years following certification.
	chemicals recorded in Annex III of the	11.d.i3 The Operator maintains complete and up to date records of all

Rotterdam Convention and in the Stockholm Convention on Persistent Organic Pollutants (POPs) shall be listed (type and annual volume used) and a plan to phase out any such chemical over the three years following certification shall be set.

- Manufacturer's safety instructions for the storage, handling, use, and disposal of chemicals shall be followed.
- The use of ground or aerial pesticides shall comply with the FAO's Guidelines on Good Practices for Ground and Aerial Applications of Pesticides. Any chemical used in biofuel operations shall be in accordance with the manufacturer's safety instructions.

11.d.2 Progress requirements

 None of the chemicals recorded in Annex III of the Rotterdam Convention or in the Stockholm Convention on Persistent Organic Pollutants shall be used within three years after certification. chemical usage, including trade name, active ingredient, quantity of active ingredient used, date of use, location of use, personnel involved in preparation and application, equipment used, weather conditions and justification for use.

- 11.d.i4 All staff and contractors involved with chemical use receive training in storage, handling, use, disposal and emergency procedures following accidental spillages.
- 11.d.i5 Manufacturer's safety instructions for the storage, handling, use and disposal of chemicals are followed.
- 11.d.i6 Containers are stored in a manner that minimizes the risk of accidents and potential negative impacts on human health and on the environment.
- 11.d.i7 Containers are washed using triple rinsing principles, and water and containers are properly disposed of in an environmentally appropriate way.
- 11.d.i8 Chemicals are disposed, recycled or destroyed in a manner that minimizes the risk of accidents and potential negative impacts on human health and on the environment.
- 11.d.i9 Transportation of chemicals to and within the operations includes measures to reduce the risk of accidents or spills and applicable health, environmental and safety precautions are implemented. (e.g. safely

RSB Criterion	Scope and Requirements	transported using appropriate equipment). 11.d.i10 Application of pesticides follows the FAO Guidelines on Good Practice for Aerial/Ground Application of Pesticides, or justified equivalent. Progress requirement 11.d.i11 There is no storage or use of any chemicals listed in the Stockholm Convention or Annex III of the Rotterdam Convention after 3 years of certification. Indicators
Criterion 11e. Residues, wastes and byproducts from feedstock processing and biofuel production units shall be managed such that soil, water and air physical, chemical, and biological conditions are not damaged.	 Operators who must comply: Feedstock Processor and Biofuel Producer. 11.e.1 Minimum requirements A waste and byproduct management plan shall exist such that wastes and byproducts are handled and/or disposed of in appropriate containers to prevent any environmental contamination and damage to human health. These products shall not be in direct contact with soils, water sources and air outside the processing and production units unless their innocuousness to the environment and people is officially stated by manufacturers or the country or regional (e.g. EU, ASEAN, ALENA) 	11.e.i1 There is a waste and byproduct management plan such that wastes and byproducts are handled, recycled, destroyed and/or disposed of in appropriate containers to prevent any environmental contamination and damage to human health. 11.e.i2 Wastes and by-products are not in direct contact with soils, water sources and air outside the processing and production units unless their innocuousness to the environment and people is officially stated by manufacturers or the country or regional (e.g. EU, ASEAN, ALENA) guidelines. 11.e.i3 Handling and disposal of wastes follows the manufacturer's recommendation and the country or regional (e.g. EU, ASEAN, ALENA) guidelines. 11.e.i4 All staff and contractors involved with handling, storage, disposal

- guidelines. In all other cases, handling and disposal must follow the manufacturer's recommendation and the country or regional (e.g. EU, ASEAN, ALENA) guidelines.
- For new and expanding operations, the design of operations shall integrate the necessary infrastructure for safe burning of processing waste and by-products.
- For existing operations, a strategy shall be set to develop the necessary infrastructures for safe burning of waste and by-products.

11.e.2 Progress requirements

Measures shall be taken to implement clean and efficient processes for conversion of residues, wastes or by-products into energy (e.g. collect biogas or heat from fermenting or burning wastes and by-products in order to generate electricity or heat) appropriate to the scale and intensity of operation. Such processes shall always occur in an appropriate facility to minimise air pollution from substances recognised as potentially harmful for the environment or human health. Solid residues from fermentation or burning shall be disposed of such that soil and water conditions or use of wastes and byproducts receive training in storage, handling, use, disposal and emergency procedures following accidental spillages.

11.e.i5 Where appropriate, burning or fermentation of wastes and byproducts are used to produce gas, electricity or heat through appropriate license and within an appropriate facility.

11.e.i6 Solid residues from burning of wastes or byproducts for electricity or heat generation (e.g. boiler) are disposed of according to national regulations and such that soil and water conditions are not damaged.

11.e.i7 The Operator has a strategy in place to develop the necessary infrastructures for safe burning of any wastes and by-products.

11.e.i8 If burning, for projects established after 1 January 2009, the design of operations integrates the necessary infrastructure for safe burning of processing waste and by-products. (11.e.i7 does not apply)

Progress requirement (For non small-scale Operators) 11.e.i9, The Operator re-uses byproducts or wastes from the processing/production unit, or transfers them to other sectors whenever their use may improve the overall system's energy balance, greenhouse gas emissions, and/or economic viability without impairing the other principles and criteria in this standard.

- are not damaged or according to national regulations.
- For others than small-scale Operators, byproducts or wastes shall also be reused by the
 processing/production unit or transferred to
 other sectors whenever their use may improve
 the overall system's energy balance,
 greenhouse gas emissions, and/or economic
 viability without impairing the other principles
 and criteria in this standard.

Principle 12: Land Rights

RSB requirement

Principle 12. Biofuel operations shall respect land rights and land use rights.

RSB Criterion	Scope and Requirements	Indicators
Criterion 12a. Existing land rights and land use rights, both formal and informal, shall be assessed, documented, and established. The right to use land for biofuel operations shall be established only when these rights are determined.	 Operators who must comply: Feedstock Producer, Feedstock Processor and Biofuel Producer. Minimum requirements The ESIA guidelines on land rights including the toolkit on stakeholder mapping shall be used to determine land rights and land use rights. Land under legitimate dispute shall not be used for biofuel operations until any legitimate disputes have been settled through Free, Prior and Informed Consent and negotiated agreements with affected land users. 	For all Operators 12.a.i1 Baseline data has been collected and documented on land use, land tenure and land rights, both formal and informal (of the land intended for use for biofuel production) according to the RSB ESIA and land rights guidelines. Where the ESIA screening process indicates that land tenure, land use and land use rights pose a risk to biofuel production: 12.a.i2 The Operator has engaged and consulted stakeholders regarding land rights and land use rights according to the ESIA guidelines on stakeholder engagement and the land rights guidelines and their concerns and comments have been documented. 12.a.i3 Where an infringement of land rights was identified in 12.a.i1 & i2,

DCD Critorion	Scope and Paguiroments	these have been settled through free prior and informed consent and negotiated agreements as set out in 12b. 12.a.i4 There is no use of land for biofuel production which is subject to an existing unresolved legitimate dispute (see RSB definition for 'legitimate dispute') that has not been settled through free prior and informed consent and negotiated settlements with affected stakeholders as per the RSB ESIA and land rights guidelines. 12.a.15 The right of the Operator to use the land for biofuels production has been established based on the documented evidence from 12.a.i1 and 12b and documented in the ESIR. 12.a.i6 Any new disputes that arise after certification as a result of ongoing biofuel operations are dealt with through the ESMP and ongoing monitoring and grievance procedures in the ESIA guidelines.
RSB Criterion	Scope and Requirements	indicators
Criterion 12b. Free, Prior, and Informed Consent shall form the basis for all negotiated agreements for any compensation, acquisition, or voluntary relinquishment of rights by land users or owners for	 Operators who must comply: Feedstock Producer, Feedstock Processor and Biofuel Producer. Minimum requirements No involuntary resettlement shall be allowed for biofuel operations. The ESIA guidelines for land rights, the consensus building toolkit and Free Prior and Informed Consent shall be used as the basis for 	These indicators only apply where land rights are to be voluntarily relinquished 12.b.i1 There has been no involuntary resettlement for the purposes of biofuel production. 12.b.i2 All negotiated agreements relating to acquisition or use of land are based on free, prior, informed consent as defined by the RSB and set out in the ESIA guidelines on land rights and the ESIA stakeholder engagement

biofuel operations.

- any negotiated agreements.
- Where land rights and land use rights are voluntarily relinquished, local people shall be fairly, equitably and timely compensated for any agreed land acquisitions and relinquishments of any land rights or land use rights.
- Compensation for voluntary relinquishment shall include appropriate balancing measures needed to preserve the ability of the persons concerned to sustain their livelihoods in an autonomous and dignified manner.
- Independent, qualified land valuation specialists shall be used for valuing all land and asset values.
- Where land is to be sold it shall be done on a willing-seller/willing-buyer basis.
- Coercion to alter existing land rights or land use rights shall not be allowed in biofuel operations
- Where the rule of law is not adequately applied, international and regional legal bodies shall be consulted for rulings and information on disputes.
- Biofuel operations shall provide for independent legal advice for communities who do not have the resources to represent their own interests in disputes.
- If there are disputes about the tenure agreements of the land among stakeholders, biofuel operations shall not be approved.

guidelines.

- 12.b.i3 Land and assets are valued by independent, qualified land valuation specialists.
- 12.b.i4 Where land rights and/or land-use rights have been voluntarily relinquished, measures are in place to ensure that all former rights holders are able to sustain their livelihoods.
- 12.b.i5 All purchases of land by the Operator have been undertaken on a willing buyer willing seller basis.
- 12.b.i6 The Operator has not used coercion to alter existing land rights and/or land-use rights.
- 12.b.i7 Where negotiated agreements have been made, these agreements have set out an agreed process and time frame for compensation.
- 12.b.i8 Agreements from 12.b.17 have been implemented in a timely manner.
- 12.b.i9 If rights holders do not have the resources to represent their own interests adequately in any dispute, independent legal advice is provided, if necessary at the expense of the biofuel producer as per the ESIA guidelines.